JOURNAL
OF THE
ARNOLD ARBORETUM

VOL. XLII APRIL 1961 NUMBER 2

THE BOTANICAL RESULTS OF THE U.S. COMMISSION OF INQUIRY TO SANTO DOMINGO IN 1871

RICHARD A. HOWARD

IN THE GRAY HERBARIUM there is a small collection of specimens which were prepared by Charles Wright, C. C. Parry, and H. Brummel during a difficult period of United States-Latin American relations nearly a century ago. The specimens bear little information beyond the name, and yet approximately forty of these are "new species" which were never published. Supporting this collection is a 130-page handwritten manuscript entitled "Flora Domingensis" and attributed to Asa Gray and Charles Wright. This, too, was never published, although with a revision of only a few pages, the manuscript, with Latin descriptions of the new species, geographical localities, and dates would have been ready for the printer. One wonders why the manuscript prepared with such care was not published; why the specimens with incomplete labels and often conflicting numbers were so haphazardly distributed to herbaria; why two such competent collectors as Wright and Parry left so little record of their expedition together; and who was the botanist H. Brummel, who is today unknown among the collectors of West Indian vegetation.

Asa Gray, in a necrology of Charles Wright (Am. Jour. Sci. 31: 17. 1886) states, "The small collection made in this, his last distant botanizing, was not of much account." Parry's biographers refer to the Santo Domingo trip as a not very successful expedition, and Urban states (Symb. Ant. 3: 143. 1902) that the botanical results of this expedition made during an unfavorable part of the year and on a hasty trip were not outstanding. These comments seem inappropriate when applied to an expedition in an area which later yielded hundreds of new species to Eric Ekman; to a collection of nearly 700 numbers; and to a manuscript which might have been one of Charles Wright's outstanding publications.

From many sources, particularly the letters of Wright, Gray, Torrey, and Oliver in the historical files of the Gray Herbarium, it has been possible to piece together notes and comments to supply this documentation of the botanical results of the U.S. Commission of Inquiry. I am grateful to Dr. Reed Rollins, director of the Gray Herbarium, for permission to publish this report on an historical document in the Gray Herbarium files;

to Mrs. Lazella Schwarten, librarian of the Gray Herbarium and the Arnold Arboretum, who has been most helpful in tracing missing items; to Dr. John Reeder, of Yale University, who located Wright, Parry and Brummel collections in the D. C. Eaton herbarium, and, finally, to Mrs. Katherine Hall and Mr. Theodore Dudley for their assistance in methodically leafing through herbaria to locate the general collections cited. Many others in the United States and abroad have assisted and their help has been appreciated.

This study developed in the course of work on a flora of the Lesser Antilles through a consideration of certain species which occur in that area. This floristic project is supported by grant G-4441 from the National Science Foundation and for this assistance grateful acknowledgement is made.

HISTORY OF THE COMMISSION OF INQUIRY

The island of Hispaniola, comprising the countries of Haiti and Santo Domingo (now the Dominican Republic), lies in an important position in the Caribbean. In the 19th century, at the time of the Commission of Inquiry, it was subjected to the interests of European countries and was torn by internal strife. There was a desire on the part of some groups in Hispaniola and of many parties in the United States for the annexation of the country to the United States. Negotiations for annexation had been carried on during the administration of President Andrew Johnson (1865–1869) to bring about at least the acquisition of Samaná Bay to serve as a strategic naval station — a guard post for the Mona Channel, the gate to the Caribbean sea and the Isthmus of Panama. Soon after the inauguration of President Grant in 1869, the question of annexation was revived. The government of Santo Domingo sent an envoy to President Grant to solicit his consideration in the matter of Dominican affiliation with the United States. To ascertain the true state of affairs on the island Grant dispatched General Orville Babcock as a confidential agent to Santo Domingo. From Babcock's report Grant became convinced, first, that what had seemed a fabulous account of agricultural and mineral resources was true; second, that it would be advantageous to obtain Santo Domingo because of its value as a mercantile and naval station; third, that the people of Santo Domingo truly were desirous of their country's annexation to the United States; and finally, that by annexing Santo Domingo it would be possible to strengthen the Monroe Doctrine, since Santo Domingo thus would avoid domination by European powers. Working from these premises, Grant set about to have passed a treaty for the annexation.

Grant's efforts met with bitter opposition from European traders who wished to monopolize the Dominican trade, from the aggressive Negro party in Hispaniola which hoped to gain control over the established Dominican government, as well as the entire island, and from some American groups whose spokesman, Charles Sumner, led the fight against annexation. When Babcock's reports were challenged, Grant established

through an act of the U.S. Senate a new party of investigation. The Commission was headed by Dr. Samuel Howe, a noted philanthropist, Benjamin Wade, a former senator, and Andrew White, the president of Cornell University. These three, with their supporting assistants, secretaries and scientists, called themselves the U.S. Commission of Inquiry to Santo Domingo. They visited Santo Domingo during the latter part of January through early March, 1871, and submitted their report, which was published as the Executive Document 9, 42nd Congress, 1st Session, 1871. The goal of the Commission was to survey the natural resources; the nature of the health, education, and government of the people; the nature of foreign claims to the area; and the attitude of the people to annexation. These goals were met fully. Although the report for the most part supported the idea of annexation, the proposal itself was defeated in the U.S. Senate. In due time even the lease on Samaná Bay was abandoned, and some years later a naval base was established in Guantanamo Bay, Cuba, as an adequate substitute.

ACTIVITIES OF THE COMMISSION

The Commission of Inquiry consisted of twenty-two official representatives traveling at government expense and ten representatives of the press who were given transportation. The scientists, in the order and with the title given in the official report, were: Prof. W. P. Blake, geologist and mineralogist; Prof. C. C. Parry, botanist; Dr. W. Newcomb, naturalist; A. R. Marvine, assistant geologist and mineralogist; E. Waller, assistant mineralogist and chemist; J. S. Adam, assistant mineralogist and chemist; Prof. H. A. Ward, zoologist and paleontologist; C. Wright, botanist; and H. Brummel, botanist. There is no information on how these men were selected, but it is apparent from the titles throughout the report that Parry was considered to be the principal botanist and that Wright and Brummel were considered as aides. At the time of the expedition, Parry was not a professor but was officially botanist for the U.S. Department of Agriculture, having been appointed to that post in 1868. Brummel apparently was an employee of the Department of Agriculture, and nothing can be found on his professional career either prior to or after the trip. Charles Wright, well known as a botanical collector, had completed his last trip to Cuba in the summer of 1867 and was operating a farm in Wethersfield, Connecticut, during the summers and working as an assistant to Asa Gray, at the Gray Herbarium in Cambridge, Massachusetts, in the winter. Both Parry and Wright were well known to Gray, and it is possible that he suggested Wright for the trip. Wright was 60 years old and in poor health at the time of the expedition, and one wonders what inducement led him to join the Commission.

The large number of reporters accompanying the Commission indicates the delicate nature of the investigations and the interest of the newspapers and the public in their findings. There is even a suggestion of intrigue in the official report of the trip. The assistant to the confidential secretary

of the Commission was discharged and sent back to New York, with the note being made in the report that this man had misrepresented himself and was, in fact, an assistant editor of an important New York newspaper. Although the reporters were supposed to be observers, the Commission delegated several of them to make special trips to gather information, with power to conduct interviews on behalf of the Commission. Letters from these reporters were published in many papers in the United States while the expedition was in the field. Feeling about the trip and the principle of annexation was high in the United States. John Torrey and Asa Gray, both to be involved in an aftermath of the Commission's trip, expressed opinions against the principle of annexation of Santo Domingo.

The Commission left New York on January 17, 1871, aboard the U.S. Steam Frigate "Tennessee" heading for Santo Domingo City. Supplies of coal ran low en route, and, on January 24, the "Tennessee" stopped in Samaná Bay, where it was joined by the cutter "Nantasket." Coal had been reported along the shores of Samaná Bay, but on investigation this proved to be a low-grade lignite. While at anchor in Samaná Bay, the Commission and its scientists were divided into parties with different assignments. One party investigated the shoreline and the anchorage of the bay, while another went to the interior of the Samaná peninsula. A third party was sent overland to Santo Domingo City with a message for the secretary of foreign affairs to announce the impending arrival of the "Tennessee" and the Commission in the capital. Still another group was sent overland to the capital to investigate the resources en route, and a last party was sent to Puerto Plata by the north coast. The "Tennessee" remained in Samaná Bay until January 29th, when it departed for Santo Domingo City, arriving there on the 31st.

On January 26th, the Commission resolved "that the botanists attached to the expedition be requested to examine and report to the Commission regarding the trees, plants, roots, and grains and their vegetable products of that part of the island adjacent to the Bay of Samana, especially with regard to such trees and plants as may be of commercial value, or in any way decidedly useful to man." According to the published report, Parry was the botanist to make this trip in a party headed by the geologist Blake. Contrary to the report, Wright's letters to Asa Gray (January 31, 1871; February 5, 1871) indicate that he also made this trip. The party left the anchorage off Samaná on January 26th and proceeded to Punta Corozos, Punta Mangle, Punta Grigri, Los Róbalos, Cabeza de Toro, and Santa Capuza, where they spent the night. On January 27th the party visited Punta Gorda, where they investigated the reported coal seam, and then proceeded to Canitas, the mouth of the Yuna river, and back to Cabeza de Toro for a night anchorage. The following day, January 28th, the Blake party visited Punta Corozos and returned to the "Tennessee" off Samaná. Parry wrote the official report of this trip entitled "Report on the botanical features, agricultural products and timber growth of the peninsula of Samana." In it he described the cultivated crops, grasses, fibers, fruits, palms and timber trees. He also stated, "The short interval allowed for

botanical examinations on the peninsula of Samana has been improved by a very fair local collection of plants numbering about two hundred species."

On January 27th, while Parry and Wright were in the field, the Commission resolved that Prof. Ward, the zoologist, make a trip along the coast in the direction of Cape Cabrón, "not exceeding ten days," and then go by land to Santo Domingo City "making a tour not exceeding a week," and that "Professor Wright and Mr. Brummel be requested to accompany Professor Ward, in order to complete the examination of the vegetable products of the peninsula." According to the official report, this party departed before Parry and the Blake party returned. Again, Wright's letters to Gray are in conflict with the published report, for Wright wrote that he sailed with the "Tennessee" and collected in the vicinity of Santo Domingo City while Brummel was traveling overland with Ward.

The Ward expedition left the Samaná anchorage and spent January 29th and 30th at Punta Cacao. They were prevented by high seas from rounding the tip of the Samaná peninsula and landed instead at "Port Francais" (Jan. 31) and went inland to Las Galeras and the Bahía del Rincón, returning to "Port Francais" the following day, February 1st. If this part of the report is true, it must have been a difficult and rapid trip and not a collecting expedition. On February 2nd, Ward and party, with Brummel along, crossed Samaná Bay, stopping at Cocal San Lorenzo. There are two specimens in the Wright, Parry and Brummel series attributed to San Lorenzo and these must have been gathered by Brummel. The party was in Savana de la Mar on February 3rd and then proceeded up the Yuna river on February 4th and 5th to Almacen (February 6th). They traveled overland to San Francisco de Macoris and on to La Vega and Cotui, all on February 7th, and on to Cevicos (February 8th), through the mountains of eastern Hispaniola to Savana la Grande, and arrived at Santo Domingo City on February 9th.

Meanwhile aboard the "Tennessee," anchored in very rough waters off Santo Domingo City, on February 4th the Commission asked Blake to make geological investigations about the capital and to organize an expedition to cross the central range of mountains to Puerto Plata, in a period not to exceed two weeks. Wright was to accompany him and to report on the vegetation of the interior. In the same resolution Parry was directed to examine the area around Santo Domingo City and to report. Wright's letters reveal that Parry was still suffering from a cold and that Wright took extended walks around Santo Domingo City; his letters describe the vegetation in considerable detail. On February 8th the report reveals that Blake accepted the directive to cross the island but that the time allotted was extended and the rendezvous time in Puerto Plata was set for March 1st.

On February 9th the botanists attached to the Commission were literally going in all directions. Parry and members of the Commission were on a leisurely trip by boat fifteen miles up the Río Ozama and then another 15 miles up a branch to the westward before returning in the late afternoon. Wright's letters and notes indicate that his party headed westward to the

Río Haina to begin a trek across the island. Brummel and party returned to Santo Domingo City on that day and apparently remained aboard the "Tennessee" to write up their report entitled, "Notes on the agricultural resources of Samana Peninsula and the Vega Real." There is a suggestion that Brummel did not collect botanical specimens on his trip with the Ward party, and his report is in contrast to others published. It is written in the most general terms and contains only one botanical scientific name. Brummel's name does not appear again in the official report of the activities of the Commission.

While the Blake party, including Wright, left Santo Domingo City to make their way to Puerto Plata, the Commission, with Parry and Brummel, remained in Santo Domingo City and concluded its work. The cutter "Nantasket" left the capital anchorage on February 14th for Puerto Plata, where some members of the Commission were to proceed inland to La Vega, meet the Blake-Wright party in Puerto Plata on March 1st and then rendezvous with the "Tennessee" at Port au Prince on March 7th. Other members of the Commission, with Parry and apparently Brummel on board, sailed with the "Tennessee" on February 14th, arriving at Ocoa Bay on the 23rd. Members of the Commission went inland to the town of Azua, and the "Wright, Parry and Brummel" specimens from Azua must have been collected by Parry or possibly Parry and Brummel during that visit. The "Tennessee" left Ocoa Bay on February 28th and arrived at Port au Prince on March 9th.

WRIGHT'S TRIP FROM SANTO DOMINGO CITY TO PUERTO PLATA

Wright's manuscript of the "Flora Domingensis" carries many references to plants collected at "interior savannas," "wet vallies of the interior," "pine woods of the interior," most with dates of collections and a few plants with specific geographical locations. The official report, however, gives barometric readings with dates and places. It is possible to coördinate these two sets of data to derive the following itinerary of the crossing of Hispaniola.

February 9, Santo Domingo City, Río Haina, Santa Rosa, Arroyo Lebrun.
February 10–11, Madrigal.
February 12, Arroyo Los Guananitos, La Puerta.
February 13, Loma Laguneta, El Aguacate.
February 14, Río Maimon, Hato del Banao.
February 15, Arroyo Yuma, Río Yuna, Río Jima.
February 16, La Vega.
February 17, La Vega.
February 18, Santo Cerro.
February 18–19, Moca.
February 21–25, Santiago (February 23. Río Yaqui del Norte).
February 26–28, Arrenquillo River, El Limón, Loma de Bajabonico.
March 1–3, Puerto Plata.

Even with modern roads, this trip of about 105 airline miles would be an arduous one by foot or by horseback. In 1871, with few established paths, these deep with the mud remaining from the rainy season, it was an heroic undertaking in the time allotted for the 60-year-old Wright. A reporter who had come by boat to Puerto Plata to visit La Vega commented, "The only road from Puerto Plata to the interior is a bridle path to Santiago. In a direct line Santiago is only 18 miles, but by path it is 60 miles." He comments that the rainy season was scarcely over and that the paths were muddy and slippery. On his arrival in Puerto Plata, Wright received instructions to report on his trip immediately. His pique clearly shows in the first paragraph of his report. "The journey was made at a season of the year when fewest plants are in flower and not many in fruit. Called to join this Commission almost at a moment's warning, no time was afforded to obtain books suitable or sufficient to determine the plants found there; and the only books brought were left on the ship from a desire to reduce the luggage to the smallest possible dimensions. Moreover, no time could be saved to examine the plants in their fresh state, and to study them carefully, without neglecting the specimens gathered, by the careful preservation of which they might be more critically examined at a future time. Even the inquiries for the vernacular names of trees met with received unsatisfactory answers. The muleteers and guide seemed to know few of the trees of the mountain regions. Even when inquiries were addressed to the inhabitants, answers, whether thoughtless or intentional, so absurdly wrong were given that I despaired of gaining much reliable information which would serve to connect with certainty the vernacular names of the plants with their scientific ones. A more particular report must consequently be postponed till a critical examination of the specimens can be made." This proved to be a forecast of trouble to come.

The rendezvous at Port au Prince between the "Nantasket" and the "Tennessee" occurred on March 9th. This date is also recorded as the departure date for Kingston, Jamaica, where the "Tennessee" arrived March 11th. The "Nantasket" apparently returned to Puerto Rico or to Saint Thomas. While the "Tennessee" re-coaled in Kingston harbor, Wright had the opportunity of visiting the government Forestry Station at Cinchona in the Blue Mountains. He refers in later letters to his knowledge of the growth of quinine trees in Jamaica. It was in this area that Wright must have collected an unnumbered specimen of *Vaccinium meridionale* (US) which has bothered monographers. The species is not known from Hispaniola but does occur in the vicinity of Cinchona.

From Jamaica the "Tennessee" proceeded to Charleston, South Carolina, arriving there March 26th. The Commission held meetings aboard the ship en route and on March 19th, while at sea between Cape San Antonio de Cuba and Key West, they resolved "that the collections made by the scientific gentlemen who have accompanied this expedition be inventoried by them and deposited in the Smithsonian Institution, subject to the disposition of Congress." That all was not harmonious in the acceptance of this resolution is attested by the comment in the official

report, "During the discussion of said resolution the Commission took a recess until 7 o'clock p.m." Whether Parry wanted the specimens for the herbarium in his charge at the Department of Agriculture or whether Wright felt his collections, or all of them, should come to the Gray Herbarium for his study can not be resolved. In any case, the issue was not settled amicably, as is obvious from a note in the official report regarding a meeting of the Commission at the Arlington Hotel, Washington, D.C., on April 3, 1871. It is noted there that the Commission "received the following letter dated April 3 from Joseph Henry, Secretary of the Smithsonian Institution: 'Sir: On reply to the inquiry you make as to the disposition of specimens collected at the expense or under the auspices of the United States Government, I have the honor to inform you that, by the law of Congress organizing the Smithsonian Institution, it is the official curator of all collections of natural history, geology, etc. belonging to the United States, and that in accordance with this enactment all the specimens collected by the Wilkes, Gilliss, Rodgers, Perry and other naval expeditions, and the Pacific Railroad Boundary and geological surveys, are now in its custody.

" 'I may further state that an annual allowance is made by Congress for the preservation and exhibition of these and such other collections as may be made, and also for the distribution of the duplicates to academies, colleges and public museums.

" 'I am, very respectfully, your obedient servant,' . . ."

Thus, at the end of the Commission's report, the fate of the collections, as well as the responsibility for working them up, remains unclear.

The "Tennessee" arrived at Charleston, South Carolina, on March 26th and put ashore the heads of the Commission and several of the scientists, including Parry, who went to Washington. Wright remained on board as the "Tennessee" sailed to the port of New York. John Torrey wrote about this trip to Asa Gray on April 1, 1871. "Wright made his appearance at the office about noon today. He came directly from the Tennessee — which has been ever since the Santo Domingo Commissioners were landed at Charleston in reaching New York. She had expended all her coal and was unable to get up from the Quarantine to the city. He was quite disgusted with the ship and the miserable quarters — or rather filthy den that they had put him in — it being the very worst in the whole vessel. H . . . took him out to dine and although he would take nothing but plain beefsteak said it was the best dinner that he had eaten since he left for S. Dom. This afternoon that good man (I do like him) left for Wethersfield. It will probably be some days before he goes to Cambridge — for his wardrobe needs replenishing and he wishes to attend to some matters at home." Torrey also added, "I have not heard from Parry since his return. It seems that he has all of Wright's S. Dom. plants as well as his own — and it is understood that you will have the bulk of the collections, although they are not very bulky." Later letters proved incorrect the implication in the last sentence that Parry then had in his possession the specimens collected.

CHARLES WRIGHT AND ASA GRAY

It is not clear when Wright returned to Cambridge, how the collections finally reached the Gray Herbarium, or, in fact, how it was determined that Wright was to identify the collections which were then to become the property of the Department of Agriculture.

On June 5, 1871, Gray wrote to Wright at Wethersfield, "Will you do up the San Domingo plants for 8 dollars a page? . . . If you come and set to work with me I shall be pleased & you shall take time to distribute your San Domingo plants. If you study them for Parry or Washington — that will take ½ your time for some months. But 8 dollars a page for 80 pages or so would fairly pay. What presses me most is work in the Garden seeing to things & names and I much wish you would take hold and help an over worked fellow."

It was during these months that Gray was deeply concerned over the condition of the Botanical Garden in Cambridge. Without adequate funds to employ the number, or even the quality, of people required by the garden, Gray was seeking the devoted individual who would work for the small sum of money available.

On June 8th, Gray wrote two letters to Wright. In the first he stated, "Nothing therefore was meant on my part but to tell you the coast is so nearly clear here that you could do something if you wished either for Herbarium or for San Domingo coll. on your own hook." In the evening Gray wrote again, "Dear Wright. Let me go on. My *bete noire* here is the garden," and he elaborated on the problems of financing the herbarium work and the care of the garden. He continued in the letter to Wright, "You prefer to be Herbarium Curator, and I wish I could keep an herb. curator pure and simple, and it is just in your way. But the Herbarium fund yields only 850 dollars which is nearly all needed to run the establishment. And I must pay for most of the aid I could get out of my pocket. I could do something that way, and I would, if only I had the Garden off my mind."

Apparently Wright misunderstood Gray's interest in giving the Garden primary consideration as some reflection on his own taxonomic ability, for Gray was forced to explain in a letter to Wright dated June 28th, "As to the way you are doing up Cuban Botany, I do not find fault with it. I think, with you, that you are doing about the best possible thing under the circumstances. The only thing that you may justly complain of me for, I think, is my sensitiveness and *pooh-poohing* new species making in families where the old species are yet all in a jumble and where I have thought that you could not yet tell what were new and what old. I dare say I have been too impatient about it, and I see I have hurt your feelings somewhat, which I am sorry for. I only meant: take time & pains to clear up the old ones in the books, and get a better assurance, if you can, about the proposed new ones. But, after all, it is wrong and foolish in me to worry myself, or you, about them.

"You will have more experience of the sort in the working up of your

San Domingo coll. But if we can get time to refer doubtful cases to say Oliver at Kew, and some one at Paris (where they have many old San Domingo plants), I suppose you may get them pretty straight.

"I suppose these collections will keep you pretty busy this summer. But I hope you can complete the incorporation of the Ind. Or. residue . . ."

Wright apparently was reassured, and he appears to have been working on the collections in the early fall of 1871.

THE FATE OF THE COLLECTIONS

Wright did not have the collections in his possession when he left the "Tennessee" in New York on April 1. On April 11, Parry wrote to Gray, "You will see Wright soon and get particulars. I do not think he was treated as his services deserved but perhaps Prof. White was not to blame. It was a badly arranged affair but Wright has at least the satisfaction of knowing that he did his duty faithfully and the results will show that he deserved better treatment. Our so called *assistant*? (Wright knows who I mean) neglected his duty to the last. I left him in charge of the heavy boxes on the ship to dry and he took the 1st. boat for land and they are still on the ship. Have written to the Agr. Dept. agent to hurry them off. This delays me sorting out the collection as I intended to do at once. Tell Wright to write me as soon as he arrives at Cambridge."

This letter suggests that all was not well on the expedition and that the relations between the "botanists" were not completely harmonious. Apparently Wright was mistreated and Brummel was not exactly an asset. The letter also suggests that Parry intended to sort out the collections. Since all the specimens I have seen bear labels stating, "Distributed by the U.S. Department of Agriculture," it is clear that the specimens did not go to the Smithsonian Institution at that time and that Parry must have had the labels prepared.

Although correspondence between Parry and Wright and Parry and Gray is referred to in many of Gray's letters, such letters are not available for reference. Gray did write to Charles Wright on June 8th of Parry's intended visit to Cambridge soon after the 20th and also reported that "your 2 S. Domingo boxes are in my back kitchen." Torrey's earlier comment suggests that the two boxes represent both Parry's and Wright's collections and that they were in Cambridge for study by Wright and Gray.

Wright apparently worked over the collection during the summer and early fall of 1871. One specimen from Azua was selected as an unnamed new genus and species of the Polygalaceae. Regrettably no specimens of this taxon were cited by number under the detailed description given in the "Flora Domingensis." I have been unable to find any specimens to which this description might refer in any American herbarium. In a letter dated September 15, 1871, Oliver, of Kew, wrote to Asa Gray, "I have delayed a few weeks in replying to your note with San Domingo fragment wishing to show it to Mr. Bentham before reporting. Unfortunately I have

little to tell. The free or possibly free stamens and anther cells make it awkward for the Polygalaceae which seems after all the best place for it. *Loxopterygium* and allied genera of the Sapindaceae won't do. I keep the scrap but will return it at a word from you." There is no way of knowing if the "scrap" was the entire specimen of the new genus or if any material was retained by Gray where it is filed. Gray acknowledged Oliver's letter on October 16, 1871. "Receive a hasty line to thank you in Wright's name for your report on the little San Domingo puzzle . . . tho you leave it a puzzle still. Keep the scrap. I send by the Darwin Junior, a small parcel for Herbarium chiefly San Domingo plants. There are 40 to 60 of these which are puzzles or dubious or 'n. sp.' of Wright — in whose determinations I have small confidence. But unless I can tell him what a thing is, I can rarely stop him from printing. Could you, as you lay out for the *Herb*. just report on them as far as you can, without too much trouble. I have never looked at one of them — no time.

"The collection as a whole is meagre & poor. But there are some things worth your having. I am going to take his collection and will send in any duplicates which you are likely to care for. The greater part are common tropical rubbish."

Oliver received this shipment in November, examined it and reported on a part of the collection in December. Gray, in turn, acknowledged Oliver's assistance in a letter of January 7, 1872.

The ferns and their allies from the collection were sent by Wright to D. C. Eaton, in New Haven, Connecticut. Eaton gave these plants his own set of numbers (1–38) and reported the identifications in a memorandum dated October 22, 1871. Wright's manuscript flora has incorporated both the Oliver and the Eaton determinations. The manuscript therefore must have been prepared in early 1872, for Wright returned to his Wethersfield farm for the spring plowing. On September 16, 1872, Wright wrote to Gray that he knew Sereno Watson was to be his successor, and, although he needed the employment and would sorely miss the income, he hoped Watson would be able to do the work well.

Wright died in 1885. Asa Gray reported in a necrology of Wright that after the Santo Domingo expedition, "a large part of several years was passed at Cambridge, taking part of the work of the Gray Herbarium; and one winter was passed at the Bussey Institution." I can find no records stating specifically why the manuscript was put aside and never finished. Wright's presence in Cambridge suggests there was an opportunity for him to complete it, but perhaps an explanation for his failure to do so can be found in other episodes which followed the completion of the Commission of Inquiry.

WRIGHT'S EXPERIENCES ON THE EXPEDITION

Torrey's letter to Asa Gray, previously quoted, suggested that Wright was mistreated on the expedition but that he did his job faithfully. Charles Wright wrote to Asa Gray on January 31, 1871, and February 5, 1871,

from Santo Domingo. In these letters are bits of information which explain Torrey's comments, as well as some of the episodes which occurred after the expedition was over.

It seems clear that Wright made the trip with the idea in mind of extending the observations he had made in earlier trips to Cuba. It is also possible that Wright planned to stay in Santo Domingo after the departure of the Commission or to return at a later date. In one letter Wright stated, "If I were to conclude to make any considerable stay, I should expect that somebody, you or foreign botanists or our government or all would back me up strongly with moral and pecuniary support, otherwise it would be unwise for me to embark in such a labor. After a few days' examination of the vicinity of Santo Domingo City I shall be better able to decide what to do." He was encouraged by several local people to stay and continue botanical work, and he received offers of hospitality and support from residents of Santo Domingo. However, Wright's enthusiasm was dampened by the accommodations of the "Tennessee" and the attitude of the Commission. Wright, at 60 years of age, was the "oldest of all the attachés of the Commission," he wrote Gray. Nevertheless, he was regarded as a junior staff member and assigned some of the poorest quarters and mess facilities on the boat. He reported, "I have not been satisfied with my location in a mess. We are distributed among the different messes — On the back deck is the ward room mess, the middies' mess and the various forward officers' messes. With one of these I was placed while all the boys, loafers, etc., nearly are in the ward room or above . . . It was a mere accident no doubt, perhaps it was wisely ordered so, as I am better able to rough it than said boys, loafers etc." After Wright's return, Torrey referred to Wright's accommodations as the "miserable quarters — or rather filthy den that they had put him in — it being the very worst in the whole vessel," and Parry wrote that he did not think Wright "was treated as his services deserved."

From Wright's letters one also learns more of Brummel. On the first trip at Samaná, Wright reported, "At Samana the land arises abruptly into very broken hills — no mangrove swamps, no level plains, one marshy flat which might have given more of its peculiar plants had we all been waders like me. Parry didn't do much and his assistant, less, unless it be windwise and in this he can beat old Eobus. Parry came on board with a bad cold and cough which he has only now shaken off. His assistant is a gardener and is more intent (and not too much so) on gathering seeds and roots than on making specimens." Torrey, too, in later correspondence with Gray, referred to "that incompetent gardener who went with the Santo Domingo expedition."

While Wright and Parry were gathering specimens as vouchers for their observations, their activities to this end were not valued. Wright wrote Gray, "Then Wade couldn't see the use of gathering so many weeds, etc., etc. It seems to me that the Commissioners care very little for any branch of science that don't have some regard to the precious metals, coral or logwood (Mr. White has already a mahogany tree of his own on board)."

When these comments are added to those previously cited and the events which involved Parry shortly after his return, it is no wonder that the botanical results of the Commission of Inquiry were not approached with enthusiasm by the participants or their associates.

PARRY'S EXPERIENCES IMMEDIATELY AFTER THE EXPEDITION

Parry returned to his position as botanist for the U.S. Department of Agriculture in early July, 1871. On September 19th, Parry wrote to Gray of attitudes and dicta by his superior that were making his professional life difficult and his personal correspondence with Gray a violation of department rules. On September 27th he was summarily dismissed from his position. Both Torrey and Gray were incensed and decided to take action on Parry's behalf. On October 3, 1871, Gray wrote to Torrey, apparently in response to a letter from him, "Parry wrote to me about the outrageous conduct. The first thing to do is for his friends to require to know the reasons why. To write an article for the papers would only express our feeling, and do no good, perhaps harm. When you go to Washington, see Prof. Henry — you two go to the commissioner yourselves directly, and ask him what it all means — asking it in reference to scientific interests of the country as well as in justice to Dr. Parry. If there is no show of reason, — as I suppose, and the commissioner will not rectify the injustice — then go to higher authorities. If your Academy is of any good it might look into it. If things are to go on let us have the facts, and we will bring them before the scientific public, and, if deserved denounce the Agricultural bureau — as being — what Capron alone seemed to be raising it from — an institution for wasting vast sums of money." A long correspondence continued between Torrey and Gray and other American and foreign botanists concerning Parry's unwarranted discharge, and a plan of action evolved. The pertinent correspondence between Gray as spokesman for the outstanding botanists and the Commissioner of Agriculture regarding Parry's dismissal was eventually published in the *American Naturalist* (January, 1872), and the letters, as well as the opinions, were the subject of articles and editorials in other American (e.g., Am. Jour. Sci. III. 3: 315–318. 1872) and foreign scientific journals. Parry was not reinstated, however, and returned to his collecting expeditions in the West. Torrey and Gray corresponded about the possible successor to Parry, and, in a letter of November 4, 1871, Torrey expressed concern for the official attitude toward the herbarium specimens Parry had accumulated and the herbarium itself. "A new man coming in — especially if it were that incompetent gardener who went with the Santo Domingo expedition (and who Parry thinks had had much to do with his removal) might do a great deal of harm." Regarding the Santo Domingo collections Torrey wrote on January 16, 1872, "Wright ought not to let the Agric. Dept. have a set until a botanist, whom Prof. Henry and those who he may consult approve of his appointment."

The office of government botanist remained vacant until April, 1872, when George Vasey, a botanist well known to Torrey and Gray, was appointed. The fate of Parry and the feud with the Commissioner of Agriculture continued, however, for on receipt of a letter from Vasey, Gray wrote to Torrey on April 27, 1872, "I answered Vasey's letter in substance thus: 'It would give me pleasure to correspond with you personally, as I always have done though I have not time now to do so to any great extent. But as Botanist of Agriculture Depart. I meet a difficulty. I understand that you are not yourself allowed to correspond with me directly. All letters as Botanist must be signed by the Commissioner etc. Now I imagine it would not be altogether pleasant nor satisfactory for me to correspond with the commissioner etc.' — Hoisting the commissioner with his own petard? I was in some hopes that Vasey might reply that he had permission to correspond with me directly, which would have been nice." There is no further correspondence between Vasey and Gray in the historical files of the Gray Herbarium. Watts remained Commissioner of Agriculture for about ten years, and Vasey occupied the post of botanist until he died in office in 1893. Vasey apparently had learned his lesson from Parry's experience, for in his first annual report (Report of the Commissioner of Agriculture for the year 1872. Government Printing Office, 1874) Vasey states, "Deeming it an important part of the work of this division to give attention to inquiries for information on questions relating to botany, and particularly to practical and economic botany, the investigation of such questions has occupied a considerable amount of time of the present officer of the division."

In the annual reports available to me, including the historical report following Vasey's death (1894), there is no mention of the specimens of the Commission of Inquiry to Santo Domingo.

Brummel, too, had dropped from sight, with no further mention of him in the available reports of the U.S. Department of Agriculture.

DATA ON THE COLLECTIONS

There is no information available from the records of the Gray Herbarium, the Smithsonian Institution, or the U.S. Department of Agriculture to indicate when the collections of the Santo Domingo Commission of Inquiry were returned from Cambridge, nor is it clear who distributed the duplicates. These points, however, may be made with certainty:

1. The most complete set of specimens is currently in the U.S. National Herbarium.

2. The set in the Gray Herbarium, though small in number, appears to represent unicates or duplicates of specimens Wright considered to be new species or unusual records. Generally speaking, these specimens are smaller in size, truly scraps, in comparison.

3. The specimens in the Kew Herbarium were sent by Asa Gray to Oliver before the full collection was distributed. These, too, represent the new species, unusual records or questionable determinations.

4. Very few specimens have been found in the herbarium of the New York Botanical Garden.

5. A few specimens have been cited by monographers from the herbarium of the Missouri Botanical Garden. These have been checked in the families Loranthaceae, Amaryllidaceae and Vitaceae. It is possible that a larger number are there representing other families. The correspondence of Engelmann is preserved at the Missouri Botanical Garden and this has been checked. There are several letters to and from Parry indicating that Parry was notified of his position on the Commission of Inquiry several months prior to the departure of the expedition. Engelmann asked particularly that Parry collect specimens of the Cactaceae for morphological study. Engelmann was not satisfied with the results, however, for, on June 8, 1871, he wrote to Parry, "Got your different things at last. One by one. But there is confusion with me or with you. Your send. 'Cereus No. 1 smooth top.' 'wood ring' also marked No. 1. But the flowers are marked No. 2, 3. Flowers, Azua and Port au Prince all in same envelope and mixed, so which is Azua and which Port au Prince. I can not make out. Now whether No. 1 and No. 2 are the same. And Jamaica and all San Domingo seem to be beautifully mixed up. There is a living plant of a Cereus, 8 ribbed, 'flowers and notes to come.' These disjointed bits are all puzzles and rob me of a good deal of time uselessly make confusion. I am too dull to unriddle them. I shall return your notes in a few days."

A comparable complaint could have been made regarding the collections of *Agave*. In one packet mounted with an *Agave* specimen there is a note from Parry, "Capsule of Agave (I think from San Domingo) I remember it was difficult to find *mature capsules*. Do Agave like Yuccas require insect agency? In Florida the Agaves flower very freely but never perfect fruit C.C.P." The words "I think" were later crossed out. Another packet of *Agave* carries, in Parry's handwriting, the annotation "capsules and seeds from different places, San Domingo. Parry."

6. A single specimen of *Cestrum* was cited by Francey from the herbarium of the Chicago Natural History Museum.

7. The number of specimens cited by Urban and other German botanists in the various volumes of the *Symbolae Antillanae* and in *Pflanzenreich* suggest that some specimens were, or are, in the Berlin Herbarium. The collections cited are rarely those numbers sent to Oliver at Kew. Only one collection which was annotated by Urban has been seen in an American herbarium.

8. The specimens of ferns and their allies were sent to D. C. Eaton by Wright and bear Eaton's numbers. Dr. John Reeder kindly had the Eaton herbarium checked for me, and, as Series II indicates, the majority of the numbers listed in Eaton's correspondence with Wright are represented in the Yale University Herbarium. A smaller number of the fern specimens are in the National Herbarium; none has been found in the Gray Herbarium.

9. Wright must have seen the entire collection in one place at one

time. His manuscript "Flora Domingensis" contains the only reference to places, dates and numbers applicable to the entire collection.

10. No field book has been found relating to this collection. Annotations by both Wright and Gray in the manuscript refer to missing "tickets," suggesting that no field book was made.

11. The packets on some, but not all, of the herbarium sheets contain slips of paper with information on the date and location of the collections. These may be the "tickets." These slips are all in the handwriting of Charles Wright and are comparable in size and details to those commonly found with Wright's Cuban collections.

12. The numbers on the specimens and in the manuscript indicate that the collection was sorted to family and to genus before the numbering was done. Wright's manuscript indicates a number for the collection and then the location. In some cases a single number refers to a specimen in flower from one location and to another in fruit made at a different location miles away and some days later. As many as seven different collections, localities and dates are recorded to one number. This was the system employed by Asa Gray and apparently followed by Charles Wright.

13. Not all of the collections or the numbers referred to in the manuscript have been located.

14. All of the collections bear the same label of a blue-gray color stating that the specimens were distributed by the U.S. Department of Agriculture.

15. Nearly all of the sheets on which the collections are mounted are characteristically discolored, suggesting that the specimens were all poisoned at one time with bichloride of mercury. This is true of Wright, Parry, and Brummel specimens as seen in four different herbaria.

The specimens of the collection made by Wright, Parry, and Brummel as seen in American herbaria were distributed without specific dates or locations. All bear names, including unpublished epithets, as given in Wright's manuscript. A very few of the sheets have been annotated. In general, the specimens have been of questionable value for lack of appropriate data. Not even the size of the collection has been known accurately. Eaton numbered 38 collections, specimens of which are in the Yale University and the U.S. National herbaria. Not all of the species given on the list sent by Eaton to Wright have been located.

The Wright manuscript contains numbers for 634 entries. However, 26 numbers are repeated or treated as "A," "B," or "X" entries. Thirteen numbers in the numerical sequence are not used in the manuscript. Several specific entries appear for which specimens are not cited. Occasionally, locations and/or dates are given for these entries, all of which refer to cultivated plants and so may represent observations. About a dozen specimens were found in the U.S. National Herbarium with data about the specimen in the packet, while Wright's manuscript stated "without ticket" and did not cite location or date. Thirteen specimens have been located, by chance, which are not cited in the manuscript and which carry no data. The specimen of *Vaccinium meridionale* previously mentioned is such a one, as is a sterile one of "*Juniperus gracilis*" (US). These

may be all or in part from Jamaica. The total collection by Wright, Parry, and Brummel must consist of about 688 numbers.

THE LOCATIONS AND DATE OF COLLECTION

The following alphabetical listing of localities may be useful in determining the geographic location, date, and probable collector of numbered specimens. It has been compiled from the official report of the expedition, from the Wright manuscript and from locality or date slips accompanying some of the specimens seen.

1. Aguacate, *Wright*, February 13, 1871.
2. Azua, *Parry*, February 23–28, 1871.
3. Bajabonico, *Wright*, February 26–28, 1871.
4. "Deep vallies of the interior." Between Santo Domingo City and Puerto Plata, *Wright*.
5. "Interior forests." Between Santo Domingo City and Puerto Plata, *Wright*.
6. "Interior savannahs." Between Santo Domingo City and Puerto Plata, probably between El Aguacate and the Río Jima, *Wright*, February 13–15, 1871.
7. La Vega, *Wright*, February 18, 1871.
8. La Vega to Moca, *Wright*, February 18, 1871.
9. Madrigal, many from Río Jaina at Madrigal, *Wright*, February 10, 1871.
10. Moca, *Wright*, February 18–19, 1871.
11. Moca to Santiago, *Wright*, February 20, 1871.
12. Ozama River, *Wright* and/or *Parry*, February 1–8, 1871.
13. Port au Prince, collector uncertain, probably *Parry*, March 9, 1871.
14. Port Francais, *Brummel*, January 31 or February 1, 1871.
15. Puerto Plata, *Wright*, March 1–3, 1871.
16. Río Guananito, *Wright*, February 12, 1871.
17. Río Jaina, *Wright*, February 10, 1871.
18. Río Vuelta, *Wright*, February 13, 1871.
19. Samaná, *Wright & Parry*, January 24–29, 1871.
20. Santo Domingo City, *Wright* and/or *Parry*, February 1–8, 1871.
21. Santo Domingo City to Puerto Plata, *Wright*, February 9–27, 1871.
22. San Lorenzo, *Brummel*, February 1, 1871.
23. San Soreijo [San Lorenzo?], Collector unknown, locality not found.
24. Santiago, *Wright*, February 21–25, 1871.
25. Santiago to Puerto Plata, *Wright*, February 24–27, 1871.
26. Savana de la Mar, *Brummel*, February 3, 1871.

IDENTIFICATION AND PRESENT LOCATION OF THE SPECIMENS

The following lists represent enumerations of the Wright, Parry and Brummel collections made while on the Commission of Inquiry to Santo Domingo. The specimens are cited in four series. The first numerical series (I) is that compiled from the Charles Wright manuscript "Flora Domingensis" now in the archives of the Gray Herbarium. The second numerical series (II) is that reported to Charles Wright by D. C. Eaton

(letter, in the Gray Herbarium, dated October 22, 1871) and consists of ferns, lycopods and selaginellas. The numbers given were assigned by Eaton. The third series (III) is unnumbered and represents specimens which were not included in the Wright manuscript and some of which were not collected in Santo Domingo. The fourth list (IV) is alphabetical and consists of species listed by Wright, primarily as observations. These are not numbered and as far as can be determined to the present are not represented by specimens.

In each list the names preceded by an asterisk (*) were considered by Wright to represent new species. Some of these had complete descriptions in the original manuscript. There are forty-one numbers so designated which represented twenty-seven new species. If the manuscript had been published in 1872 when prepared, thirteen of the species would be recognized today, for the specimens can be assigned to acceptable species described after that date. Eight of the species are in difficult groups or consist of inadequate material and so can not be accurately assigned at the present time. Wright, Parry, and Brummel collections are the holotypes of eleven species described by other authors since 1871.

Names which are given in quotation marks in the following lists have been taken directly from the Wright manuscript and validating specimens have not been seen. Only the generic name is given if the complete epithet has not been published elsewhere. The number following the specific name refers to the alphabetical list of locations and dates given above. If such a number is not given, the Wright manuscript either listed two or more specimens, localities and dates for one collection number or the data were missing from the manuscript. The location of specimens is designated in parentheses by standard herbarium abbreviations (Lanjouw & Stafleu). The specimens as designated have either been seen by the author or are reported to occur in that herbarium and are listed in the citation of specimens by monographers and others.

Not all of the specimens listed below are satisfactorily identified. Many of the genera concerned need revision. In the difficult genera of the Loranthaceae and in the genera *Eugenia* and *Psychotria* the Wright, Parry, and Brummel specimens I have seen are of poor quality and are inadequate for determination at the present time.

Numerical Series I

1. *"Nasturtium brevipes,"* 7
2. *Drymaria cordata*, 15 (US)
2B. *Sauvagesia erecta*, 6 (K, US)
3. *"Capparis cynophallophora,"* 25
4. *Capparis cynophallophora* (US)
4B. *Capparis baducca* (US)
5. *Hybanthus linearifolius* (US)
6. *"Anona* sp."
6B. *Oxandra lanceolata* (US)
7. *"Bocagea laurifolia"*
8. *Polygala longicaulis*, 6 (US)
8X. *Agave intermixta*,[1] 24 (GH, MO, US)
9. *Polygala paniculata*, 15 (US)
9X. *Agave antillarum*, 24 (US)
10. *Polygala penaea*, 24 (US)
11. *Securidaca virgata*, 20 (US)
12. *Samyda dodecandra*, 20 (US)
13. *Xylosma coriaceum*, 15 (US)
14. *Xylosma coriaceum*, 15 (US)
15. *Casearia comocladia*, (US)
16. *Casearia hirsuta*, 11 (US)
17. *Casearia arborea*, 4 (US)
18. *Conocarpus erecta*, 15 (US)
19. *Conocarpus erecta* var. *sericea*, 13 (US)
20. *Combretum laxum* (US)
20X. *Ochroma pyramidale* (US)
21. *Trichilia pallida* (K, US)
22. *Xylosma coriaceum*, 15 (US)
23. *Rhacoma crossopetalum*, 15 (US)
23B. *Schafferia frutescens*, 15 (US)
24. *Rhacoma ilicifolia*, 6 (US)
25. *Begonia brachypoda*, 25 (US)
26. *Melothria guadalupensis* (K, US)
27. *Passiflora suberosa* (US)
28. *"Passiflora pallida"*
29. *Passiflora murucuja*, 19 (F, MO, US)
30. *Passiflora suberosa* (US)
31. *Anguira pedata* (US)
32. *Cayaponia racemosa* (US)
33. *Sechium edule* (US)
34. *Mormordica charantia* (US)
35. *Fevillea cordifolia* (US)
36. *"Turnera ulmifolia"*
36. *"Phaseolus clitorioides,"* 19
37. *"Piriqueta cistoides,"* 6
38. *"Malachra texana,"* 15
39. *Sida acuminata* (K, US)
40. *Sida hederaefolia* (US)
41. *Dalechampia scandens*, 2 (US)
41. **Rhacoma gonoclada*,[2] 20 (K)
42. *Wissadula amplissima*, 20 (US)

[1] Trelease studied the Wright, Parry, and Brummel material of *Agave*, noting that it was a mixed collection (Mem. Natl. Acad. Sci. **11**: 31, 32, *pls. 41–43, 64.* 1913). Part of the collection was referred to *Agave antillarum* Descourt. and part was selected as the type of *Agave intermixta* Trelease. (Trelease had prepared a complete description of this species and a discussion of its affinities. Such a manuscript is currently in the herbarium of the Missouri Botanical Garden. For some unknown reason a much abbreviated description was given as a footnote in the reference cited above and the discussion was never published.) The single specimen in the Gray Herbarium is without number, but in a packet is a field note carrying most of the data given in the Wright manuscript. The same slip indicates that a specimen was sent to Dr. Engelmann and it is this specimen at the Missouri Botanical Garden which was designated as the holotype by Trelease. The collection was made on the bank of a stream near Santiago de los Caballeros on February 22, according to the field notes. In the manuscript Wright stated the collection was made on "steep hills" near Santiago.

The text for *Plate 43* in Trelease's monograph of the genus *Agave* in the West Indies suggests that the leaf margin included in *Figure 1* may be that of *Agave intermixta*. This illustration agrees with the leaf specimen in the Gray Herbarium which is mounted on the same sheet with the flowers typical of *Agave intermixta* and not *Agave antillarum*.

[2] Wright used the name *"Myginda gonioclada*, n. sp.," in his manuscript. Kuntze cited this name in synonymy when transferring the species to the genus *Crossopetalum* (Rev. Gen. 1: 116. 1891). Kuntze does not indicate where he saw the name Wright

43. *Malvastrum spicatum*, 20 (US)
44. *"Malachra capitata,"* 19
45. *Centrosema virginiana*, 19 (US)
45. *"Melochia tomentosa"*
46. *Sida ciliaris* (US)
47. *Sida rhombifolia*, 21 (US)
48. *Pithecellobium circinale*, 2 (GH, US)
49. *Bauhinia divaricata*, 13 (US)
50. *Acacia tortuosa* (US)
51. **Rhacoma gonoclada*, 2 (K, US)
52. *Caesalpinia pauciflora*, 13 (US)
53. *Corynella dubia*, 13 (GH, US)
54. *Rhodopis planisiliqua* (GH, US)
54. *Guarea trichiloides*, 21 (US)
55. blank
56. blank
57. **Vilmorinia glyciphylla*, 21 (GH, US)
58. *Calliandra portoricensis*, 20 (US)
59. *"Desmodium incanum,"* 19
60. *Calopogonium caeruleum*, 20 (US)
60. *"Mimosa ceratonia"*
61. *Acacia lutea*, 20 (GH, US)
62. *Centrosema pubescens* (US)
63. *"Galactia cubensis,"* 19
64. *"Aeschynomene sensitiva,"* 19
65. *"Vigna luteola,"* 19
66. *"Mimosa ceratonia"*
67. *Phaseolus adenanthera*, 19 (US)
68. **Inga vera*, 19 (K)
69. *Acacia lutea* (US)
70. *Crotalaria retusa*, 19 (US)
71. *Mucuna sloanei* (US)
72. *"Rhynchosia reticulata"*
73. *Cassia biflora*, 20 (GH, US)
74. *Albizia lebbeck* (US)
75. *Inga laurina*, 15 (US)
76. **Poitea galegoides*, 21 (US)
77. *Stylosanthes hamata*, 20 (US)
78. *Sophora tomentosa* (US)
79. *"Cassia diphylla"*
80. **Vilmorinia glyciphylla*, 21 (K)
81. *Desmanthus virgatus* (US)
81B. *"Anguria pedata"*
82. *Crotalaria verrucosa*, 15 (GH, US)
83. *Senegalia angustifolia*, 25 (US)
84. *Teramnus uncinatus* (US)
85. *Desmanthus virgatus* (US)
86. *Inga laurina* (US)
87. **Vilmorinia glyciphylla*, 21 (US)
88. **Corynella paucifolia*, 9 (K, US)
89. *Barbieria pinnata*, 21 (US)
90. *"Mimosa ceratonia,"* 21
91. *Poitea galegoides*, 21 (US)
92. *Alysicarpus nummularifolius* (US)
93. *Poitea galegoides*, 21 (US)
94. *Desmodium adscendens*, 9 (US)
95. *Erythrina poeppigiana*, 9 (US)
96. *Pictetia spinifolia* var. *ternata*, 24 (US)
97. **Corynella paucifolia*, 24 (K, GH)
98. *Ateleia gummifera*, 24 (US)
99. *Poiretea scandens*, 21 (GH, US)
100. *Haematoxylon campechianum*, 20 (GH, US)
101. blank
102. *Hibiscus brasiliensis* (US)
103. *Pavonia spinifex*, 20 (US)
104. *Sida acuta* (US)
105. *Melochia nodiflora*, 19 (US)
105. *Sida rhombifolia*, 19 (US)
106. *Corchorus hirsutus* (US)
106A. *"Urena sinuata"*
107. *Helicteres jamaicensis* (US)
108. *Melochia tomentosa*, 13 (US)
109. *"Corchorus hirtus,"* 21
110. *Waltheria americana*, 20 (US)
111. *Triumfetta lappulacea*, 19 (K, US)
111A. *"Triumfetta semitriloba"*
112. *Malpighia domingensis*, 24 (US)
113. *Stigmaphyllum lingulatum*, 24 (US)
114. *Stigmaphyllum ovatum*, 19 (US)
114A. *"Cordia laevigata"*
115. *Stigmaphyllum ovatum*, 19 (US)

---

coined. Oliver, in correspondence, reported Wright's new species to be similar to another specimen collected by Schomburgk at Azua. Urban finally described *Rhacoma gonoclada* (Symb. Ant. **5**: 75. 1904). He cited both the names used by Wright and Kuntze and indicated that he saw the specimen in the Kew Herbarium. The number "41" here duplicated from Wright's manuscript is probably an error for "51."

116. *Bourreria succulenta* (US)
117. *Byrsonima coriacea*, 1 (US)
118. *Bunchosia media*, 7 (US)
119. *Stigmaphyllum lingulatum*, 20 (US)
120. *Stigmaphyllum lingulatum*, 15 (US)
121. *Malpighia domingensis*[3] (US)
122. *Stigmaphyllum angulosum*, 20 (US)
123. *Triopteris ovata*, 13 (GH, US)
124. *Malpighia aquifolia*, 2 (US)
125. *Malpighia domingensis*, 20 (US)
126. *Thryallis glauca*, 20 (US)
127. *"Triopteris rigida,"* 15
128. *Banara domingensis* (K, US)
129. *"Guarea trichilioides,"* 19
130. *Picramnia pentandra* (US)
131. *Corchorus siliquosus* (US)
132. *Melochia pyramidata* (US)
133. *Colubrina ferruginosa*, 20 (US)
134. *Muntingia calabura* (US)
135. *Hydrocotyle hirsuta*, 20 (US)
136. *Dalbergia ecastophyllum*, 19 (US)
137. *Rondeletia berteriana*, 20 (GH, US)
138. *"Picramnia pentandra"*
139. *"*Myrtus* (*Eugenia*) sp. nov.,"[4] 20
140. *Miconia racemosa*, 21 (US)
141. *"Miconia laevigata,"* 19
142. *Clidemia hirta*, 19 (US)
143. *Miconia prasina*, 19 (US)
144. *Ossaea acuminata*, 2 (US)
145. *"Miconia nicotianafolia,"* 2
146. *Acidanthera quadrata*, 6 (US)
147. *Miconia racemosa*, 21 (US)
148. *Nepsera aquatica*, 6 (US)
149. *Miconia laevigata*, 19 (US)
149A. *"Nepsera aquatica,"* 6
150. *Miconia prasina*, 26 (US)
151. *"Miconia impetiolaris,"* 19
151A. *"Casearia ilicifolia"*
152. *Picramnia pentandra* (US)
153. **Serjania polyphylla* (US)
154. *Paullinia pinnata*, 19 (US)
155. *Gouania lupuloides*, 19 (US)
156. *Gouania polygama*, 19 (US)
157. *Serjania polyphylla*, 19 (US)
158. *Rajania cordata* (US)
159. **Serjania sinuata*,[5] 25
160. *Securidaca virgata*, 19 (US)
161. *Allophylus rigidus*, 13 (US)
162. *Rourea surinamensis*, 21 (US)
163. *Eugenia pseudopsidium* var. *portoricensis*,[6] 20 (US)
164. *Mouriria domingensis*, 10 (US)
165. *Syzygium jambos* (US)
166. *Eugenia* aff. *umbellulifera*, 20 (US)
167. *Eugenia monticola* (US)
168. *Eugenia myrtoides*, 15 (US)
169. **Eugenia* sp. nov. (K)
170. **Eugenia* sp. nov.[7] (GH, US)

[3] Small selected this specimen as the holotype of *Malpighia domingensis* (N. Am. Fl. **25:** 156. 1910). According to the Wright manuscript, the specimen was collected on February 14, 1871, when Wright was in the area between Río Maimon and Hato del Banao. Collections *112* and *125* listed by Wright as the same were made at Santiago and Santo Domingo City respectively.

[4] Wright described this collection, citing also No. 166, as a new species. He reported "collected from bushes 10–15′ growing nearly on the site of the old city of SD hence it is as likely to be something introduced from abroad as to be indigenous. Feb. 30. The species seems most likely to belong to Berg's genus Myrcianthus or possibly to Myrtus." The date given is in error but no correction can be offered. Wright was in Puerto Plata on February 30th and he did not arrive in Santo Domingo City until January 31st in the earlier part of his trip.

[5] This collection was named *"Serjania apiculata* n. sp." by Wright. On the field label Wright reported the collecting locality to be between Santiago and Puerto Plata and the date, February 25. Radlkofer (Pflanzenr. IV. **165**(Heft 98a): 117. 1933) gave Wright's unpublished name and reported he saw a specimen in the Kew herbarium.

[6] This specimen bears the annotation, "determined by Urban."

[7] The collections *169* and *170* are cited in the Wright manuscript as new species with an unpublished name. Collection *169* was sent to Oliver at Kew. Both collections were made on February 18th and on that date Wright was between Santo

171. *Ternstroemia peduncularis*, 21 (US)
172. *Ardisia escallonioides*,[8] (GH, K, US)
173. *"Prunus sphaerocarpa,"* 25
174. *Simaruba glauca*, 9 (US)
175. *Sesuvium portulacastrum* (US)
176. *Hydrocotyle umbellata*, 19 (US)
177. *Bourreria virgata* (US)
178. *Hirtella triandra*, 19 (US)
179. *Guaiacum officinale*, 2 (US)
180. *Lawsonia inermis* (US)
181. *Jussiaea leptocarpa*, 19 (K, US)
182. *Jussiaea leptocarpa*, 19 (US)
182A. *"Jussiaea salicifolia"*
183. *Jussiaea erecta*, 19 (US)
184. *Cissus caustica*, 8 (US)
185. *Ampelocissus robinsonii* (GH, K, MO, US)
186. *"Vitis sicyoides,"* 19
187. *Bursera simaruba*, 19 (US)
188. *Anacardium occidentale* (US)
189. **Comocladia dentata* (GH, K, US)
190. **Comocladia domingensis*[9] (US)
191. *Comocladia dodonaea*, 20 (US)
192. **Comocladia cuneata*[10] (K, US)
193. *Calophyllum brasiliensis* var. *antillanum*, 19 (US)
194. *Chrysobalanus icaco*, 23 (US)
195. *Eugenia pseudopsidium* var. *portoricensis*, 20 (US)
196. *Comocladia dodonaea*, 20 (GH, US)
197. *Tetragastris balsaminifera*, 9 (K, US)
198. *"Lagenaria vulgaris,"* 24
199. *Annona reticulata* (US)
200. *Mormordica charantia* (US)
201. *Chrysophyllum olivaeforme*, 20 (US)
201. *Centrosema virginiana* (US)
202. *Chrysophyllum argenteum*, 9 (US)
203. **Chrysophyllum olivaeforme* (K, GH)
204. **Psychotria pinularis*, 15 (US)
205. *Psychotria tenuifolia* (US)
206. *Psychotria domingensis*, 19 (US)
207. *Psychotria grandis*, 19 (US)
208. *"Psychotria uliginosa,"* 19
209. *Psychotria berteriana* (GH, US)
210. *Palicourea barbinervia* (US)
211. *Psychotria brachiata*, 21 (US)
212. *Hamelia patens*, 19 (US)
213. *Palicourea domingensis* (US)
214. *Chiococca alba* (US)
215. *"Ernodea litoralis,"* 15
216. *"Ixorea ferrea,"* 15
217. *Psychotria revoluta*, 15 (US)
218. *Micromeria viminea*, 13 (US)
219. *"Rauwolfia nitida,"* 20
220. *Ernodea litoralis*, 15 (US)
221. *Diodia maritima*, 15 (US)
222. *Cornutia pyramidata*, 15 (US)
223. *Borreria ocimoides* (US)
224. *Bourreria domingensis*, 20 (US)
225. *Guettarda scabra* (US)
226. *Chione exserta*, 9 (GH)
227. *Psychotria revoluta*, 9 (US)
228. *Borreria verticillata*, 17 (US)
229. *"Borreria parviflora,"* 9
230. *Manettia calycosa*, 21 (US)
231. *Borreria ocimoides* (US)

Cerro and Moca. The two specimens of *170* which I have seen can not be identified with certainty at this time.

[8] This collection was identified and cited by Mez (Pflanzenr. IV. **236**(Heft 9): 81. 1902) who apparently saw the specimen at Kew. Urban (Symb. Ant. **8:** 520. 1921) and Moscoso (Cat. Flor. Dom. 471, 1943) repeated the reference. Wright's manuscript noted that "no ticket" was available to give location and date of the collection.

[9] The Wright manuscript notes that this collection has a "mixed ticket." The locality given is Santo Domingo City but the data apply to a species of *Piper*. Britton selected this collection as the type of his new species (Bull. Torrey Club **37:** 350. 1910).

[10] Britton selected the specimen at the U.S. National Herbarium as the type of his new species *Comocladia acuminata* (Bull. Torrey Club **37:** 349. 1910). Since this epithet is a later homonym, he renamed it *Comocladia cuneata* (Bull. Torrey Club **41:** 9. 1914). Wright's manuscript reported the collection was without data.

232. *Borreria laevis*, 9 (US)
233. *Erithallis vaccinaefolia*, 9 (US)
234. *Randia aculeata* (GH, K)
235. *Antirrhoea lucida*, 25 (US)
236. *Parathesis serrulata*, 19 (US)
237. **Guettarda preneloupii*[11] (K, US)
238. *Guettarda scabra*, 21 (US)
239. *Sauvagesia erecta*, 21 (US)
239. *Tournefortia scabra*, 21 (US)
240. *Tournefortia scabra*, 21 (US)
240. *Diodia sarmentosa* (US)
241. **Randia erythrocarpa*, 13 (US)
242. *Catesbaea parvifolia*, 2 (US)
243. *"Ixorea ferrea,"* 15
244. *Psychotria brachiata*, 21 (US)
245. *Erithallis fruticosa* (K)
246. *Randia parvifolia* (US)
247. *Eupatorium* sp.,[12] 13 (US)
248. ***Gochnatia oligantha*** (Urban) Howard, comb. nov.[13] (GH, K)
249. *Enhydra sessilis*, 19 (US)
250. blank
251. *Eleutheranthera ruderalis*, 7 (US)
252. *Eupatorium odoratum*, 20 (US)
253. *Mikania scandens*, 19 (US)
254. *Mikania cordifolia*, 19 (US)
254. *Luffa cylindrica* (US)
255. *Salmea scandens*, 19 (US)
256. *"Wedelia carnosa,"* 19
257. *Pacourina edulis*, 19 (GH, US)
258. *Borrichia arborescens* (US)
259. *Melanthera Buchii* 19 (US)
260. *Erigeron jamaicensis* (US)
261. **Chaptalia primulacea*,[14] 15 (GH, K)
262. *Pluchea odorata* (US)
263. *Porophyllum ellipticum* (US)
264. *Ageratum conyzoides* (US)
265. *Eupatorium obtusissimum* (US)
266. *Verbesina alata* (US)
267. *Tithonia rotundifolia* (US)
268. **Senecio haitiensis*, 25 (K, US)
269. *Chaptalia nutans*, 6 (US)
270. *Vernonia racemosa*, 11 (US)
271. *Senecio plumbeus*, 15 (US)
272. *Erigeron jamaicensis*, 10 (US)
273. *Vernonia sprengeliana*, 20 (US)
274. *Vernonia sprengeliana*, 20 (US)
275. *Eupatorium obtusissimum*, 15 (US)
276. *Synedrella nodiflora*, 19 (US)
277. *Salmea scandens*, 19 (US)
278. *Wedelia gracilis*, 21 (US)
279. *Vernonia buxifolia*, 21 (US)

[11] Wright's manuscript gives two dates, February 3 and 9, for this collection made between Santo Domingo City and Puerto Plata. On both dates Wright was in the vicinity of Santo Domingo City.

[12] Wright used an unpublished specific name (referring to the incised margin of the leaves) which he attributed to Grisebach. I have been unable to identify accurately the material cited.

[13] Urban described this as *Anastraphia oligantha* (Symb. Ant. **3:** 417. 1903), the basionym of the new combination above, citing in synonymy *Anastraphia pauciflosculа* used by Wright in his manuscript and on the specimens of this number. Wright's invalid name was also used by Hitchcock (Ann. Rep. Mo. Bot. Gard. **4:** 102. 1893). Urban cited only a collection by Wright, Parry, and Brummel, without giving it a number. In a later publication (*loc. cit.* **8:** 746. 1921) Urban refers to "Wright, Parry and Brummel 248." This collection must be considered the type, and, although Urban does not indicate the source of his material, he must have examined the specimen at Kew which is to be considered the holotype. Roy Jervis has annotated the specimen in the Gray Herbarium with a name transferring the species to the genus *Gochnatia*. This combination was not published. Wright indicated in his manuscript that the field label with location and date are missing.

[14] Wright annotated this collection with an unpublished name referring to the long leaves. He sent a specimen to Oliver who suggested it had affinities with *Chaptalia longiflora*. Greene described the collection as *Chaptalia primulacea* (Leafl. Bot. Obs. **1:** 195. 1906) selecting a specimen in the U.S. National Herbarium as the holotype. Robinson annotated both the Gray Herbarium specimen and the Greene publication suggesting that the species is the same as *Chaptalia membranacea* Urban. The collection was made on March 2, at Puerto Plata.

280. *Pectis carthusianorum*, 6 (US)
281. "*Chrysanthellum procumbens*," 10
282. *Pectis procumbens*, 6 (US)
282. *Hieracium gronovii* (GH)
283. blank
284. **Isodorea pungens*,[15] 20 (GH, K, US)
285. *Wallenia laurifolia*, 19 (US)
286. *Wallenia laurifolia*, 19 (US)
287. *Erithallis fruticosa*, 19 (US)
288. *Randia aculeata* (US)
289. *Gonzalagunia spicata*, 19 (US)
290. *Chiococca alba*, 19 (US)
291. *Psychotria revoluta* (US)
292. "*Palicourea guianensis*"
292. *Palicourea crocea*, 19 (US)
293. *Palicourea barbinerve* (US)
294. *Palicourea riparia*, 19 (US)
294B. *Palicourea crocea* (US)
295. "*Psychotria berteriana*," 19
296. *Psychotria pubescens*, 19 (US)
297. *"*Psychotria* sp. nov.,"[16] 9 (GH)
297. *Psychotria microdon*, 15 (US)
298. *Diodia rigida*, 6 (US)
299. *Spermacoce tenuior*, 15 (US)
300. "*Spermacoce* sp.,"[17] 19
301. **Lobelia salicina*, 19 (K, US)
302. *Lobelia cliffortiana*, 20 (US)
303. "*Conradia reticulata*," 4
304. "*Ardisia crenulata*," 19
305. *Dipholis salicifolia*, 19 (US)
306. "*Jacquinia ruscifolia*," 24
307. *Citharexylum fruticosum* (US)
308. *Jacquinia Eggersii* (US)
308. *Citharexylum fruticosum* (US)
309. *Hippocratea volubilis* (US)
310. *Cestrum macrophyllum*, 19 (US)
311. *Solanum polyacanthum*, 21 (US)
312. "*Solanum callicarpaefolium*"
313. *Cestrum diurnum*[18] (F)
314. "*Cordia globosa*"
315. *Bourreria virgata*, 24 (US)
316. *Cordia curassavica* (US)
317. "*Nama jamaicensis*"
318. *Buchnera elongata*, 6 (US)
319. *Cordia lima*, 7 (US)
320. "*Melochia serrata*"
321. *Cordia serrata*, 13 (US)
322. *Cordia sebestena* (K, US)
323. *Wigandia urens*, 16 (US)
324. *Cordia nitida* (US)
325. "*Pavonia typhalea*"
326. *Scoparia dulcis*, 20 (US)
327. blank
328. "*Bourreria virgata*," 24
329. *Cordia globosa* (US)
330. *Lantana involucrata*, 15 (US)
331. "*Capraria biflora*"
332. *Bacopa stricta*, 21 (GH, US)
333. *Gerardia fasciculata*, 6 (US)
334. *Lobelia domingensis*, 6 (K, US)
335. *Ammania latifolia*, 21 (US)
336. *Cordia sulcata*, 19 (GH, US)
337. *Lantana camara* var. *mista*,[19] 19
338. "*Heliotropium parviflorum*," 20
339. blank
340. "*Scutellaria havanensis*," 19
341. *Ocimum gratissimum* (US)
342. *Leonotis nepetaefolia*, 19 (US)
343. *Hyptis pectinata*, 19 (US)
344. *Scutellaria havanensis*, 15 (US)

[15] In his manuscript Wright recognized this collection as a "new species" which he called *Isodorea pungens* citing in synonymy *Ernodea pungens* Lam. Robinson had access to the Wright manuscript and the specimen in the Gray Herbarium, although he neither cited the specimen nor gave Wright credit in making the new combination *Isodorea pungens* (Lam.) Robinson (Proc. Amer. Acad. Arts Sci. **45**: 401. 1910). Wright's specimen was collected on cliffs by the river, near Santo Domingo City, on February 3.

[16] This material is inadequate for accurate determination but appears to be *Psychotria pinularis*.

[17] The Wright manuscript ascribes a specific name attributed to Jacquin to this collection. I can find no reference to the publication of this epithet.

[18] Wright's manuscript cites "*Solanum verbascifolium*" for this number; however, Francey in his monograph of *Cestrum* (Candollea **6**: 286. 1936) cites a specimen from the Chicago Natural History Museum as given above.

[19] This collection, as well as *357*, was cited by Moldenke (An alphabetized list of citations **3**: 1146. 1949) as identified. The herbarium source of the material is not stated.

345. blank
346. *Hyptis suaveolens*, 19 (US)
347. *Hyptis capitata*, 19 (US)
348. *Hyptis lantanifolia*, 9 (US)
349. *Ocimum gratissimum*, 19 (US)
350. *"Salvia occidentalis"*
351. *Hyptis americana*, 19 (US)
352. *Hyptis pectinata*, 19 (US)
353. *Stachytarpheta jamaicensis*, 19 (GH, US)
354. *Priva lappulacea*, 20 (US)
355. *Petitia domingensis*, 7 (US)
356. *Clerodendron aculeatum* (US)
357. *"Cornutia pyramidata,"* 15
358. *Acalypha alopecuroides* (US)
359. *Acalypha setosa*, 20 (GH, US)
360. *Blechum brownei* (US)
361. *Dicliptera assurgens*, 20 (US)
362. *Ruellia tuberosa* (US)
363. *Teliostachya alopecuroides*, 9 (US)
364. *Barleriola solanifolia*, 2 (US)
365. **Ruellia coccinea*, 19 (K, US)
366. *Justicia pectoralis* (US)
367. *Justicia sessilis*, 20 (US)
368. *Ruellia domingensis*, 21 (US)
369. *Justicia pectoralis*, 19 (GH, US)
370. *Cordia serrata*, 21 (US)
371. *Jacquemontia pentantha*, 20 (US)
372. *Jacquemontia nodiflora* (US)
373. *Merremia umbellata*, 20 (US)
374. *"Ipomoea umbellata,"* 20
375. *Rivea corymbosa*, 20 (US)
376. *Merremia quinquefolia* (US)
377. *Jacquemontia nodiflora* (US)
378. *Ipomoea eriosperma* (US)
379. blank
380. *"Ipomoea campanulata,"* 19
381. *"Ipomoea cathartica"*
382. *"Ipomoea fastigiata"*
383. *"Ipomoea cathartica"*
384. *Ipomoea acuminata* (US)
385. *Ipomoea acuminata* (US)
386. *"Ipomoea fastigata"*
387. **Ipomoea setifera*,[20] 19 (GH, K)
388. *Ipomoea tiliacea* (US)
389. *Ipomoea tiliacea* (US)
390. *Rivea campanulata*, 19 (US)
391. *Cuscuta americana*, 20 (US)
392. *"Limnanthemum humboldtianum,"* 10
393. *Schultesia heterophylla*, 6 (US)
394. *Micranthemum nuttallii*, 18 (US)
394B. **"Micranthemum* sp. nov.,"[21] (GH, K)
395. *"Utricularia pusilla"*
395. *Tabernaemontana citrifolia*, 6 (US)
396. *"Tabernaemontana neriifolia"*
396. *Psychotria undata* (GH, US)
397. *"Ipomoea fastigiata"*
397. *Rhabdadenia berterii*, 21 (US)
398. *"Tabernaemontana neriifolia,"* 15
399. *Distictis lactiflora* (K)
400. *Calatropis procera* (US)
401. *Isotoma longiflora*, 19 (US)
402. *Rhabdadenia paludosa*, 19 (US)
403. *Asclepias nivea* (US)
404. *"Echites umbellata"*
405. *Echites umbellata* (US)
406. *Urechites lutea*, 15 (US)
407. *Rauvolfia nitida*, 20 (US)
408. *Anagadenia berterii*, 21 (US)
409. *"Echites repens,"* 19
410. *Exostema longiflorum* (US)
411. *"Metastelma leptocladon,"* 21
412. *"Piper dilatatum,"* 21
412. *Metastelma Picardae* (US)
413. *Tabernaemontana amygdalifolia*, 17 (US)
414. *"Cestrum pallidum,"* 20
415. *Nectandra antillana*, 9 (US)
416. *"Phoebe montana,"* 21
417. blank
418. *Linociera domingensis*, 21 (US)
419. *"Nectandra willdenoviana"*
420. *Ocotea leucoxylon*, 19 (US)
421. *"Nectandra willdenoviana"*

[20] This collection bears an unpublished specific name relating to the peninsula of Samaná where the specimen was collected January 27, 1871. Neither this specimen nor any of the other Convolvulaceae here have been cited by House or other monographers of the family.

[21] Wright had prepared a complete description for publication but was unable to supply data on the date or location of the collection. The genus requires a monographic treatment before the cited specimens can be determined.

422. *Licaria triandra*, 10 (US)
423. *Trichostigma octandrum*, 21 (US)
424. *"Pisonia aculeata,"* 9
425. *Pisonia aculeata*, 25 (US)
426. *Rapanea guianensis* (US)
427. *Rapanea ferruginea*, 9 (GH, US)
428. *"Chamissoa altissima,"* 20
429. *Iresine angustifolia*, 20 (US)
430. *Alternanthera geniculata* (US)
431. *"Rousselia lappulacea,"* 19
432. *Pilea repens*, 19 (US)
433. *Fleurya aestuans* (US)
434. *Urera baccifera*, 19 (US)
435. *Ficus trigonata*, 8 (US)
436. *Ficus citrifolia*, 8 (US)
437. *Ficus citrifolia*, 8 (US)
438. *Ficus trigonata*, 10 (US)
439. *"Marcgravia umbellata"*
440. *Piper aduncum*, 19 (US)
441. *Piper aduncum*, 19 (US)
442. *Piper dilatatum* (US)
443. *Piper jacquemontanum*,[22] 19 (GH, US)
444. *Piper marginatum*, 21 (MO, US)
445. *Piper hispaniolae*[23] (US)
446. *Piper parryanum*,[24] 19 (US)
447. *Piper dilatatum* (US)
448. *Piper parryanum*, 19 (GH, MO, US)
449. *Peperomia distachya*, 19 (US)
450. *"Peperomia caulibarbis"*
451. *Peperomia serpens*, 19 (US)
452. *Peperomia serpens*,[25] 19
453. *Peperomia glabella*, 19 (US)
454. *Dendrophthora marmeladensis*, 21 (US)
455. *Dendrophthora marmeladensis*, 21 (US)
456. *"Dendrophthora wrightii,"* 21
457. *Dendrophthora flagelliformis*, 15 (US)
458. *Phoradendron anceps*, 15 (US)
459. **Phoradendron cerinocarpum*
459A. *Phoradendron chrysocarpum*[26] (US)
460. *Phoradendron hexastichum*, 21 (US)
461. **Phoradendron mucronatum* (GH, K, US)
462. *Phoradendron mucronatum*, 9 (US)
463. *Dendrophthora flagelliformis*, 15 (US)
464. *Phoradendron dichotomum*, 10 (US)
465. *Phoradendron piperoides*,[27] 25 (US)
466. *Phoradendron dichotomum*, 24 (US)
467. *Phoradendron antillarum*, 21 (US)
468. *Dendropemon purpureus* (US)
468A. *Dendropemon uniflorus* (US)
469. **Dendropemon alatus* (GH, K, US)
470. **Dendropemon alatus*, 2 (GH, K, US)

[22] This collection was cited by Trelease (Repert. Sp. Nov. **23:** 307. 1927) as given above.

[23] Trelease selected the specimen in the U.S. National Herbarium as the holotype of this species which he described as new (*loc. cit.* 309). Wright's manuscript gives one collection number but two locations for the material: Puerto Plata, February 26, and Samaná, January 27. I have been unable to determine the original locality of the holotype.

[24] Trelease cited *Wright, Parry & Brummel 446* and *448* in describing this species as new (*loc. cit.* 311). Number *446* was selected as the holotype in the U.S. National Herbarium. Both collections were made in Samaná on January 28, 1871.

[25] Trelease (*loc. cit.* 323) cited this collection number without indicating the location of the specimen.

[26] *Wright, Parry & Brummel 459* is cited by Trelease (The Genus *Phoradendron*. Univ. Ill. Bull. **13:** 139. 1916) as the holotype of *Phoradendron cerinocarpum*. The specific epithet is attributed to Wright and occurs in the manuscript. Unfortunately, the numerical designation in the Loranthaceae is badly mixed. Number *459* is reported to have been collected between Moca and Santiago, on February 21, and on the road from Santo Domingo City to Puerto Plata, on February 13, a date when Wright was in the vicinity of Loma Laguneta and El Aguacate.

[27] Cited under this name by Trelease (*loc. cit.* 147).

471. *Suriana maritima*, 13 (US)
472. *Coccoloba swartzii*, 21 (GH, K, US)
473. *Coccoloba swartzii*, 21 (GH, US)
474. **Coccoloba fuertesii*, 21 (GH, K, US)
475. **Coccoloba nodosa*, 21 (GH, K, NY, US)
476. **Coccoloba incrassata*, 2 (GH, K, US)
477. **Coccoloba diversifolia* (GH, US)
478. *Exostema caribaeum*, 2 (US)
479. *Pisonia aculeata* (US)
480. *Cyathula achryanthoides*, 19 (US)
481. *Fleurya aestuans*, 21 (US)
482. *Pilea repens*, 17 (US)
483. *Rousselia humilis*, 19 (US)
484. *Tabebuia berteri*, 6 (US)
485. *Tabebuia berteri* (US)
486. *Forsteronia corymbosa* (US)
487. *Rhabdadenia paludosa* (US)
488. "*Echites repens*," 19
489. *"*Guettarda* sp. nov." [28]
490. *Jatropha gossypifolia* (US)
491. *Adelia ricinella*, 2 (US)
492. *Acalypha setosa*, 19 (GH)
493. *Acalypha glechomifolia* (US)
494. *Clerodendron aculeatum* (US)
495. *Argithamnia candicans*, 15 (US)
496. "*Phyllanthus nobilis*," 25
497. "*Drypetes alba*," 19
497. *Psychotria revoluta*, 19 (K, US)
498. *Drypetes alba* (US)
499. "*Drypetes* sp. nov.," [29] 15
500. *Drypetes alba*, 15 (US)
501. *Drypetes alba*, 21 (US)
502. **Ilex* aff. *macfadyenii*,[30] 21 (US)
503. *Croton origanifolius* (GH, US)
504. "*Croton flavens*," 2
505. *Croton pallidus* (GH)
506. *Croton discolor*, 24 (US)
507. *Croton linearis*, 13 (US)
508. *Euphorbia prostrata* (US)
509. *Euphorbia buxifolia*, 13 (US)
510. "*Euphorbia heterophylla*," 15
511. *Euphorbia hirta*, 19 (US)
512. *Euphorbia heterophylla*, 15 (US)
513. *Solanum antillarum*, 21 (US)
514. *Peperomia obtusifolia*,[31] 9 (US)
515. *Erithallis fruticosa*, 15 (K, US)
516. *Stigmaphyllon lingulatum* (US)
517. *Exothea paniculata*, 19 (US)
518. **Cuphea micrantha* [32] (K)
519. *Cuphea parsonsia*, 16 (US)
520. "*Miconia fothergilla*," 9
521. *Miconia macrophylla*, 1 (US)
522. *Tetrazygia bicolor*, 6 (US)
523. *Heterotrichum umbellatum*, 21 (US)
524. *Ossaea acuminata*, 6 (US)
525. *Miconia elata*, 21 (US)
526. *Miconia rubiginosa*, 9 (GH, US)
527. *Dieffenbachia seguine*, 19 (US)
528. *Costus cylindricus*, 19 (GH, US)
529. *Pistia stratiotes*, 7 (US)
530. *Hypoxis erecta*, 6 (US)
531. *Heteranthera limosa*, 6 (US)
531A. *Heteranthera spicata* (US)
532. *Cipura palludosa*, 6 (US)
533. *Anthurium scandens*, 4 (US)
534. *Tillandsia valenzuelana* (US)
535. "*Anthurium* sp.," [33] 19
536. "*Anthurium* sp.," [33] 19
537. *Cissampelos pareira* (US)

[28] No material has been seen of this number. Wright described a new species in his manuscript citing *237* and *489*. The former has been referred to *Guettarda preneloupii*. The collections were made near Santo Domingo City on February 3rd and 9th.

[29] Wright compared his material with "*Drypetes incurva* Mull." and suggested it was perhaps a distinct species. The specimen was collected at Puerto Plata on February 26. No material has been located.

[30] Wright's notes indicate that he collected this specimen on February 15 when he travelled in the vicinity of the Arroyo Yuma, the Río Yuna and the Río Jima.

[31] Trelease had annotated this sheet with a new specific name honoring Brummel and indicated this as the type. The name apparently was never published.

[32] This specimen has not been cited by monographers of the Lythraceae. The unpublished specific name referred to Santo Domingo. The specimen was collected "in the savannas of the interior at Madrigal" on February 11, 1871.

[33] Wright uses in his manuscript a name attributed to Schott which appears to be unpublished. No description is given and no specimens have been located.

538. *Dioscorea polygonoides*, 19 (US)
539. *Smilax populnea*, 15 (US)
540. *Smilax domingensis* (US)
541. *Callisia monandra*, 20 (US)
542. *Tradescantia geniculata* (US)
543. *Commelina elegans*, 19 (GH, US)
544. *Commelina elegans* (US)
545. *Commelina diffusa*, 20 (US)
546. *Callisia monandra*, 21 (US)
547. *Thrinax parviflora*, 20 (US)
548. blank
549. *Coccothrinax* sp.,[34] 14 (US)
550. *Copernicia* sp.,[34] 2 (US)
551. *Pleurothallis gelida*, 5 (US)
552. *Epidendrum rigidum*, 19 (US)
553. "*Aeranthus* sp.," 9
554. *Tetramicra parviflora* (GH, US)
555. blank
556. *Ponthieva glandulosa*, 5 (US)
557. "*Spiranthes elata*," 21
557A. *Pelexia* sp. (US)
558. "*Pelexia setacea*"
559. *Malaxis spicata*, 19 (US)
560. *Syringodium filiforme*, 15 (US)
561. "*Epidendrum bifidum*," 5
562. *Ponthieva glandulosa*, 6 (US)
563. *Epidendrum wrightii*, 21 (US)
564. "*Epidendrum broughtonioides*," 6
565. "*Polystachya luteola*"
566. *Oncidium variegatum*, 19 (US)
566A. "*Epidendrum bifidum*"
567. "*Cranichis muscosa*"
568. "*Spiranthes apiculata*," 6
569. *Ponthieva ekmanii*, 5 (US)
570. "*Epidendrum nocturnum*," 22
571. *Epidendrum strobuliferum*, 19 (US)
572. "*Aeranthus* sp.," 19
573. *Epidendrum difforme*, 19 (US)
574. *Bletia patula*, 5 (GH, US)
574A. *Bletia patula* (US)
575. *Xyris caroliniana*, 6 (US)
576. *Cyperus peruviana*, 9 (US)
577. *Cyperus densicaespitosus*, 19 (US)
578. "*Rhynchospora florida*," 21
579. *Cyperus haspan*, 6 (US)
580. "*Scirpus exiguus*," 6
581. *Rhynchospora barbata* (US)
582. *"*Eleocharis* sp. nov." [35]
583. *Rhynchospora barbata* (US)
584. "*Fimbristylis brizoides*," 6
585. "*Rhynchospora barbata*"
586. blank
587. *Eleocharis capitata*, 9 (US)
588. "*Rhynchospora vahliana*"
589. "*Rhynchospora glauca*," 19
590. *Fimbristylis dichotoma*, 6 (US)
591. *Rhynchospora barbata* (US)
592. *Eleocharis retroflexa*, 19 (US)
593. *Cyperus nanus*, 15 (US)
594. *Scleria secans*, 19 (US)
595. *Cyperus elegans*, 15 (US)
596. *Eleocharis geniculata* (US)
597. "*Eleocharis plantagineus*," 19
598. *Fuirena umbellata*, 19 (US)
599. *Rhynchospora pusilla*, 19 (US)
600. *Eleocharis chaetaria*, 6 (US)
601. "*Dichromena pusilla*," 19
602. "*Kyllingia brevifolia*," 19
603. *Mayaca fluviatilis*, 6 (US)
604. "*Carex scabrella*," 15
605. *Pharus latifolia* (US)
606. "*Pharus latifolius*," 19
607. *Paspalum laxum*, 19 (US)
608. *Ichnanthus pallens*, 19 (US)
609. "*Paspalum compressum*," 19
610. *Chloris sagraeana*, 19 (US)
611. *Eragrostis ciliaris*, 19 (US)
612. *Chloris inflata* (US)
613. "*Orthopogon labiaceus*," 19
614. *Lasiacis patentiflora*, 19 (US)
615. *Lasiacis sloanei*, 19 (US)
616. **Hyparrhenia hirta*, 12 (US)
617. *Paspalum laxum* (US)
618. *Paspalum laxum* (US)
619. *Phragmites communis* (US)
620. *Paspalum virgatum*, 19 (US)
621. *Cenchrus brownii* (US)
622. *Digitaria villosa* (US)
623. *Reynaudia filiformis*, 6 (US)
624. "*Cenchrus viridis*," 19
624A. *Panicum stenodes*, 6 (US)
625. *Andropogon virgatus*, 6 (US)
626. *Arundinella confinus*, 6 (US)
627. *Panicum diffusum*, 21 (US)
628. "*Tricholaena insularis*"

[34] The available material of these palms is inadequate for accurate determination.

[35] A specimen collected in "springy places in savannas of the interior, Feb. 10," according to Wright's manuscript. No specimens have been located.

629. *Andropogon bicornis* (US)
630. *Tricholaena insularis* (US)
630. *Paspalum paniculatum* (US)
631. **Andropogon saccharoides*, 6 (US)
632. **Andropogon saccharoides*, 6 (GH, US)
633. *"Panicum dichotomum,"* 21
634. *Digitaria horizontalis*, 19 (US)

Series II

1. *"Lycopodium mexicanum"*
2. *Ananthacorus angustifolia* (US)
3. *Adiantum deltoideum* (US, YU)
4. *Adiantum cristatum* (US, YU)
5. *Adiantum obliquum* (US, YU)
6. *Lindsaea portoricensis* (US)
7. *Adiantum fragile* (US, YU)
8. *Dryopteris serra* (US, YU)
9. *Pteris longifolia* (US, YU)
10. *Pityrogramma tartarea* (US, YU)
11. *"Gleichenia pubescens"*
12. *Dryopteris tetragona* (YU)
13. *Polypodium salicifolium* (US)
14. *Polypodium astrolepis* (US)
15. *Aspidium scolopendrioides* (YU)
16. *Tectaria heracleifolia* (US)
17. *Tectaria martinicensis* (US, YU)
18. *Pityrogramma sulphurea* (US, YU)
19. *Trichomanes krausii* (US, YU)
20. *Trichomanes lineolatum* (US)
21. *Trichomanes krausii* (US)
22. *Anemia hirsuta* (YU)
23. *Anemia adiantifolia* (YU)
24. *Cheilanthes microphylla* (US, YU)
25. *Asplenium serratum* (US, YU)
26. *Alsophila aquilina* (US)
27. *Cyclopeltis semicordata* (US, YU)
28. *Asplenium dentatum* (US)
29. *Pityrogramma calomelaena* (US, YU)
30. *Asplenium cristatum* (US)
31. *Dryopteris dentata* (US)
32. *Cyathea arborea* (US, YU)
33. *Odontosoria aculeata* (US, YU)
34. *Alsophila aquilina* (US)
35. *Selaginella plumosa* (US, YU)
36. *Lycopodium cernuum* (US, YU)
37. *"Lycopodium complanatum"*

Series III

Aristolochia aff. *pentandra* [36] (K)
Bidens leucantha (US)
Guazuma ulmifolia (US)
Hura crepitans, 19 (US)
Hymenaea courbaril (US)
Ipomoea batatas, 19 (US)
Ipomoea pes-caprae (US)
Iresine celosia (US)
Juniperus gracilis (US)
Mimosa pudica (US)
Nopalea cochenillifera, 10 (GH)
Pinus occidentalis (US)
Vaccinium meridionale [37] (US)
Zamia pumila (US)

Series IV

Ananas sativus, 19
Annona cherimola
Annona muricata
Annona palustris
Sebastiana corniculata, 9

[36] Determination by Oliver, 1871.
[37] Probably collected near Cinchona, Jamaica.